REMARKS

Claims 1-9 are active. No shortened statutory period for response is set therefore it is believed that the 6 month statutory period for response is the due date for this paper or Feb. 18, 2007. Claims 1 and 3 are rejected under 35 USC 103 as being unpatentable over Heeger '284 publ. in view of Hagler. Claims 4, 6 and 9 are objected to as improper multiple dependent claims and have not been treated on the merits. Claim 5 is rejected as being anticipated by Heeger et al. '284 publ. Claim 7 is rejected as being anticipated by Wakita '889. Claims 2 and 3 are rejected as being unpatentable over Heeger '284 in view of Hagler and Bradley.

The objected to claims 4, 6 and 9 are amended as to formal matters and this basis of the rejection is believed met and should be withdrawn. Examination on the merits of these claims is respectfully requested.

Applicants traverse the rejections of the claims over the cited references for the following reasons.

Claim 1

This claim calls for:

> A substrate and/or underlayer of an electronic component, which substrate or underlayer is to be coated with an organic functional layer, wherein said substrate or underlayer comprises a partially crystalline and /or axially stretched (well-ordered) plastics film such the orderliness of the plastics film enables the application of the functional material thereto in the form of a well-ordered layer.(underlining added)

The underlined portion refers to the organic functional layer which is a separate discrete layer on the substrate and is not a composite blend composition with the underlayer as disclosed in the cited references. See the semiconductor layer 3 of the figure and the corresponding description at paragraph 0013 of the substitute specification. The Action rejects this claim over Heeger in view of Hagler. The Action cites par. 0102 of Heeger as teaching a substrate and or underlayer of an electronic component (OLED) stating that the substrate or underlayer is a partially crystalline or axially stretched well ordered plastics film such that the orderliness of the film enables the application of the functional material thereto in the form of a well ordered layer.

Applicants point out that par. 0102 is misconstrued by the Action. While the Heeger reference states that "MEH-PPV is cast onto a film of pure USMWE-PE which has been stretched to a moderate draw ratio," **there are no** two separate layers with one layer on an underlayer as claimed. This section of this reference refers to the reference number 11, which is the same Hagler article referenced by the Action as being combined with Heeger.

In Hagler, the covering of the stretched film of pure UHME-PE is made to build a blend of a conjugated polymer with a polymer guest or carrier polymer. Measurements are made of the blends containing polymers as guests in polyethylene (See Physical Review B, Vol. 44, Number 16, page 8653). Neither cited reference suggests or discloses an electronic device with a separate polymer or organic functional layer over a

substrate or other under layer which comprises a partially crystalline and /or axially stretched (well-ordered) plastics film as claimed.

Neither of these cited references disclose separate layers of functional polymers, but always polymer blends. These are composites or functional or conjugates polymers together with carrier polymers, but not separate layers. The enhanced properties are those of a composite layer and not of an independent and separate layer on a substrate as claimed.

Thus as claimed there is a lower layer or substrate which comprises a plastic film such that the orderliness of the plastics film enables the application of the functional material thereto in the form of a further well-ordered layer, and not a composite as suggested by the cited references. The functional material is produced as a separate layer which is built up on the underlayer or substrate plastics film.

This claimed subject matter is not known either from Heeger or Hagler, taken individually or in combination, which only disclose composites or blends with the conjugated polymer or the functional polymer, but no separate layers with the functional polymer as claimed , and which are different.

The techniques disclosed in these references are not relevant to what is claimed in claim 1. This claim is believed allowable.

Claim 5, rejected as anticipated by Heeger, is a method claim which calls for forming a conducting or semiconducting layer on an undersurface comprising an

oriented, stretched (well-ordered) plastics film and which claim is somewhat similar in subject matter as claim 1. Claim 5 is believed allowable for similar reasons as claim 1.

Claim 7 is amended to include subject matter similar to claim 1 and is believed allowable for similar reasons.

As to Bradley, claims 2, 3 and 8, even though Bradley discloses axially stretching of plastic material, there is no suggestion that such plastics could be useful for substrates in organic electronic components as underlayers. That is applicants contribution. The Action states that one of ordinary skill would know that films could be biaxially stretched as well as axially stretched. While this might be true, there is no motivation to do so, since none of the cited references disclose or suggest biaxially stretched or partial crystalline plastic would be advantageous for organic electronic components.

Further, the Action asserts that the biaxial stretching would enhance the covered area of the substrate or underlayer. This is not what is claimed. The claims are directed to adding a layer or uses a different substrate or underlayer to increase the charge carrier mobility within the functional layer. This structure is foreign to the cited references which provide no motivation for the claimed structure. Claims 2, 3 and 8 are believed further allowable for these reasons.

Claims 2-6 and 8-9 depend from claim 1 and are believed allowable at least for these reasons as well as the structures claimed therein not shown or suggested by the cited references. These claims are believed allowable.

Since claims 1-9 have been shown to be in proper form for allowance, such action is respectfully requested.

No fee is believed due, however, any fee due for this paper or overpayment is respectively requested to be charged or credited to deposit account 03-0678.

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Janice Speidel — November 20, 2006
Janice Speidel — Date

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